

CNMP Facility Assessments



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**A needs determination that
goes beyond feedlot runoff issues.**

Items Addressed

- ❑ Surface Water Pollution Potential
 - Feedlot Runoff
 - Silage Leachate
 - Milk Parlor Wash Water
- ❑ Odors
- ❑ Ground Water Pollution Potential
- ❑ Mortality Management
- ❑ Storage Facilities



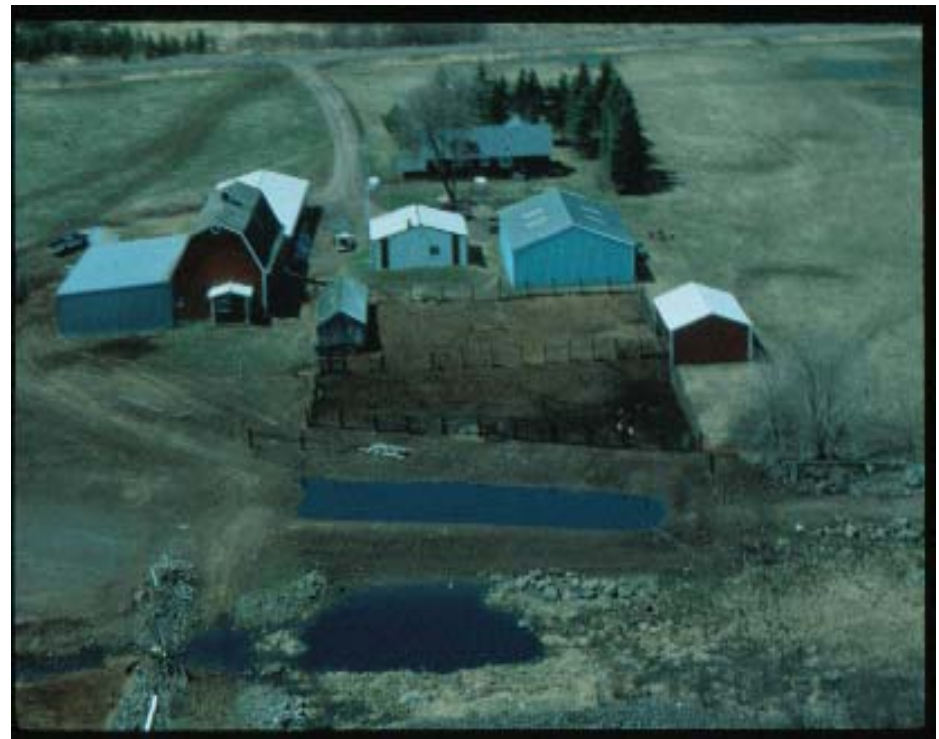
Items Addressed

- ❑ Emergency Response Plan
- ❑ O & M Plan
- ❑ Safety Issues



Basic Information

- Sketch of existing lots and structures
 - Similar to sketch done for FLEVAL
 - Drainage areas and directions
 - Location of wells
 - GIS can be used



Basic Information

- ❑ Manure handling system
 - Present
 - Future



Basic Information

- Animal housing and management
 - Present & Future
- Number and type of animals
 - Present & Future



Basic Information

- ❑ Minimum storage period required
- ❑ Need to get this from the nutrient management plan
- ❑ Will be compared against current storage volume



Surface Water Pollution Assessment

- ❑ FLEVAL Results
- ❑ What is the minimum level of control required to meet NRCS Standards?



Milk Parlor Wash Water

- ❑ Septic tanks
 - Leach field?
 - Tile Connection?
- ❑ Discharge to wetland
- ❑ Straight to surface or tile



Silage Leachate

- Evaluation
 - Ask producer
 - Look at concrete
 - Look at vegetation



Mortality Management

- ☐ Rendering
- ☐ Burial
- ☐ Composting
- ☐ Incineration



Mortality Management

- ❑ Drag into woods?
- ❑ Bury in water table of gravel pit?



Ground water pollution potential

- ❑ Sources of basic information
 - Soil Survey for 0-60"
 - Geologic Atlas
 - Local Knowledge
 - Sinkhole presence
 - Well Logs (many online)
 - Water test



Ground Water Pollution Potential

- Well Location
- Well Construction
 - Surface water excluded?





Ground Water Pollution Potential

- Possible sources of contamination
 - Leaking storage pond or tank
 - Contaminated runoff
 - On permeable soils
 - Into sinkholes
 - Improper mortality disposal

Ground Water Pollution Potential

- ❑ Active feedlots on permeable soil not considered a ground water problem
- ❑ Runoff from the lot may be a problem though



Storage Facilities

- Volume
 - Annual production
 - Present volume
- Design and Construction



Storage Facilities

Indicators for follow-up

- Visible signs of problems
- Contamination in tile
- Never fills up
- Fills up too fast
- No design on pond



Odors

- ❑ Complaints from neighbors
- ❑ Proximity to neighbors or cities
- ❑ Your observations
- ❑ May need to run OFFSET model if there is a question



Photo by Larry Jacobsen, U of M, BAE Dept.

Safety Issues

- ❑ Optional, but recommended
- ❑ Manure storage and handling facilities only
- ❑ Note obvious hazards
 - Unfenced storage
 - Entry points to “Confined Spaces”
- ❑ Tie in with Emergency Response Plan



Emergency Response Plan

□ Spills

- Embankment or structure breach
- Pipe or valve failure
- Overtopping



Emergency Response Plan

- ❑ Safety issues
 - Storage ponds
 - Confined Spaces





O&M Plan

- Does one exist
 - If so get a copy
 - Is it adequate?
- If not, one will need to be prepared later
 - Generic plans available
 - Document manure handling system

Summary of Recommendations

- ❑ Will be used as the game plan for engineering designs
- ❑ Must be clear enough to spell out minimum requirements
- ❑ Must be coordinated with the Nutrient Management Plan





Summary of Recommendations

- ❑ Minimum runoff control required for each lot
- ❑ Minimum requirements for wash water, silage leachate, mortality disposal, etc.
- ❑ Minimum requirements for storage volume
- ❑ Recommendations for existing storage facilities
- ❑ Odor abatement recommendations
- ❑ Safety items noted
- ❑ Emergency Response, O&M Plans



Questions?